

March 5, 2018

David Cozzie Group Leader Fuels and Incineration Group Environmental Protection Agency 109 T.W. Alexander Drive Durham, NC 27709

Re: GPA Midstream OOOOa White Paper Supplemental Information

Dear David,

Thank you for taking the time to meet with us a couple of weeks ago. Per our meeting below is the follow up information that we discussed.

Issue #1: EPA Must Exclude Midstream Assets from the Definition of Well Site

To prevent midstream meters from being subject to well site LDAR programs, GPA proposes to add the following definitions of "Custody Meter" and "Custody Assembly" and incorporate that term into the description of "the collection of fugitive emissions components at a well site" affected facility. Suggested language changes are presented below along with unchanged language that is presented for reference.

40 CFR §60.5365a – Modify subparagraph (i)

40 CFR §60.5365a(i) Except as provided in §60.5365a(i)(2), the collection of fugitive emissions components at a well site, as defined in §60.5430a, up to but not including the upstream flange of the custody meter assembly, as defined in §60.5430a, is an affected facility.

40 CFR §60.5365a(i)(1) [Reserved]

40 CFR §60.5365a(i)(2) A well site that only contains one or more wellheads is not an affected facility under this subpart. The affected facility status of a separate tank battery surface site has no effect on the affected facility status of a well site that only contains one or more wellheads.

40 CFR §60.5365a(i)(3) For purposes of §60.5397a, a "modification" to a well site occurs when:

40 CFR $\S60.5365a(i)(3)(i)$ A new well is drilled at an existing well site;

GPA Midstream Association Sixty Sixty American Plaza, Suite 700 Tulsa, Oklahoma 74135 (918) 493-3872 40 CFR §60.5365a(i)(3)(ii) A well at an existing well site is hydraulically fractured; or 40 CFR §60.5365a(i)(3)(iii) A well at an existing well site is hydraulically refractured.

40 CFR §60.5430a – Add new definitions for "Custody Meter" and "Custody Meter Assembly."

40 CFR §60.5430a Custody Meter is a metering point at the well site where hydrocarbon liquids or natural gas are measured for sales, transfers, and/or royalty determination.

40 CFR §60.5430a Custody Meter Assembly means an assembly of components including the custody meter and a small number of components such as valves, flanges and connectors necessary for the proper operation of the custody meter.

Issue #3: EPA Should Simplify and Extend Deadlines for Compressor Station Leak Monitoring

GPA Midstream is providing EPA with data on leak rates and leak counts across five different companies and 110 compressor stations across the country. This data is located in the Appendix to this document with each company listed on a separate tab. This data strongly supports GPA Midstream's request to move from quarterly to annual monitoring.

There are two overwhelming trends that can be seen in the data.

- 1. Leak rates and numbers start low and remain low
- 2. After the initial monitoring event, leak rates decrease and stay low regardless of frequency

With these overwhelmingly low leak rates, the cost-benefit model for quarterly monitoring cannot be substantiated. In light of this additional information, GPA Midstream strongly advocates that the monitoring frequency for the gathering and boosting sector should be annual.

GPA Midstream also notes that EPA data on gas plants should also reflect reductions in leak rates over time.

Issue #4: EPA Should Simplify the LDAR Monitoring Plan Requirements and Issue #5: EPA Should Simplify the Recordkeeping Requirements by Eliminating Redundant and Overly Burdensome Requirements

GPA reviewed the rule requirements and found that the goals around the observation path (ensuring all subject components are monitored) are adequately addressed by other requirements in the rule. The observation path requirement is redundant because the rule already requires that subject components are monitored. It is the responsibility of the owner/operator to ensure compliance through good procedures, training, and internal quality checking. A site map with equipment highlighted is not going to ensure that components are monitored, and the extent to which it *might* improve compliance is not justified by the burden of creating and maintaining this record, especially because equipment and components (and thus, the observation path) frequently change at compressor stations with the addition and removal of compression. Additionally, compressor stations are not like gas plants which might have large areas of piping/equipment not subject to the rule (thus creating risk that some subject components might not be monitored). At

most compressor stations, every component at the facility will be in methane or VOC service and subject to monitoring.

40 CFR §60.5397a – Delete paragraph 60.5397a(d)(2)

40 CFR 60.5397a(d) Each fugitive emissions monitoring plan must include the elements specified in paragraphs (d)(1) through (4) of this section, at a minimum, as applicable.

40 CFR 60.5397a(d)(2) A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences. [RESERVED]

40 CFR §60.5430a Describes which components are subject to the rule.

40 CFR §60.5430a Fugitive emissions component means any component that has the potential to emit fugitive emissions of methane or VOC at a well site or compressor station, including but not limited to valves, connectors, pressure relief devices, openended lines, flanges, covers and closed vent systems not subject to §60.5411a, thief hatches or other openings on a controlled storage vessel not subject to §60.5395a, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission. Emissions originating from other than the vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions.

40 CFR §60.5397a Requires that all fugitive emission components must be monitored.

40 CFR §60.5397a(a) You must monitor all fugitive emission components, as defined in §60.5430a, in accordance with paragraphs (b) through (g) of this section. You must repair all sources of fugitive emissions in accordance with paragraph (h) of this section. You must keep records in accordance with paragraph (i) of this section and report in accordance with paragraph (j) of this section. For purposes of this section, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21.

40 CFR §60.5397a(c)(7)(iii) Requires a procedure to determine maximum viewing distance and how the operator will ensure that this distance is maintained.

40 CFR 60.5397a(c)(7) If you are using optical gas imaging, your plan must also include the elements specified in paragraphs (c)(7)(i) through (vii) of this section.

40 CFR 60.5397a(c)(7)(iii) Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.

40 CFR §60.5397a(c)(7)(v)(C) Requires a procedure on how the OGI operator will deal with interferences.

40 CFR 60.5397a(c)(7) If you are using optical gas imaging, your plan must also include the elements specified in paragraphs (c)(7)(i) through (vii) of this section.

40 CFR 60.5397a(c)(7)(v) Procedures for conducting surveys, including the items specified in paragraphs (c)(7)(v)(A) through (C) of this section.

40 CFR 60.5397a(c)(7)(v)(C) How the operator will deal with interferences (e.g., steam).

40 CFR §60.5397a(c)(8) Requires compliance with Method 21, which is an acceptable monitoring procedure for many industries, include gas plants, and which does not require an observation path.

40 CFR §60.5397a(c)(8)(iii) If you are using Method 21 of appendix A-7 of this part, your plan must also include the elements specified in paragraphs (c)(8)(i) and (ii) of this section. For the purposes of complying with the fugitive emissions monitoring program using Method 21 a fugitive emission is defined as an instrument reading of 500 ppm or greater.

40 CFR 60.5397a(c)(8)(ii) Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR part 60, appendix A-7, including Section 8.3.1.

40 CFR §60.5397a – Delete paragraph 60.5397a(d)(2)

40 CFR 60.5397a(d) Each fugitive emissions monitoring plan must include the elements specified in paragraphs (d)(1) through (4) of this section, at a minimum, as applicable.

40 CFR 60.5397a(d)(2) A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences. [RESERVED]

Issue #7: EPA's Capital Expenditure Definition Must Be Revised

Electronic documents were sent on February 15, 2018.

Issue #8: EPA Should Not Apply a "Once In, Always In" Policy for LDAR Monitoring at Compressor Station Sites

GPA previously provided suggested language changes to address this issue, and we have made updates to the suggested language below. The updates are intended to address ambiguities in the current rule language related to when modification is triggered.

GPA additionally notes that this issue becomes less important if the monitoring frequency is reduced from quarterly to annually. This is because continuing an LDAR program with quarterly monitoring in perpetuity is a much greater burden to owners and operators than continuing an LDAR program with annual monitoring in perpetuity.

 $40 \text{ C.F.R.} \ 60.5365a(j) - \text{Add subparagraph } (j)(3)$

40 CFR $\S60.5365a(j)$ The collection of fugitive emissions components at a compressor station, as defined in $\S60.5430a$, is an affected facility. For purposes of $\S60.5397a$, a "modification" to a compressor station occurs when:

40 CFR §60.5365a(j)(1) An additional compressor is installed at a compressor station such that the total installed compressor horsepower is greater than the total installed compressor horsepower present at the facility on [DATE OF PROPOSED RULE]; or

40 CFR §60.5365a(j)(2) One or more compressors at a compressor station is replaced by one or more compressors of greater total horsepower than the compressor(s) being replaced such that the total installed compressor horsepower is greater than the total installed compressor horsepower present at the facility on [DATE OF PROPOSED]

RULE]. When one or more compressors is replaced by one or more compressors of an equal or smaller total horsepower than the compressor(s) being replaced, installation of the replacement compressor(s) does not trigger a modification of the compressor station for purposes of §60.5397a.

40 CFR §60.5365a(j)(3) A compressor station which subsequently removes or alters compressors such that total installed compressor horsepower is equal to or less than the total installed compressor driver horsepower present at the facility on the [DATE OF PROPOSED RULE] shall remain an affected facility under this subpart.

40 C.F.R. § 60.5397a – Add subparagraph (k)

40 CFR $\S60.5397a(k)$ A compressor station which meets the criteria of $\S60.5365a(j)(3)$ is no longer required to comply with paragraphs (a) through (j) of this section and must submit the certification in $\S60.5420a(b)(13)$ in its next annual report and maintain records in $\S60.5420a(c)(15)(iv)$.

40 C.F.R. § 60.5420a(b) – Modify subparagraph (b) and add subparagraph (b)(13)

40 C.F.R. § 60.5420a(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (8) and (12) of this section and other information performance test reports as specified in paragraph (b)(9), θr (10), or (13) of this section, if applicable...

(13) For each compressor station which meets the criteria of \S 60.5365a(j)(3), you must provide certification of this change in compliance requirements in the annual report.

40 C.F.R. § 60.5420a(c)(15) – Add subparagraph (iv)

40 C.F.R. § 60.5420a(c)(15)(iv) Records substantiating a claim according to § 60.5397a(k) that the compressor(s) added to the compressor station that caused the modification for the compressor station has been subsequently removed.

Issue #18: EPA Must Clarify that the Notification Requirements in 40 C.F.R. § 60.15(d) Do Not Apply to Pneumatic Controllers, Centrifugal Compressors, Reciprocating Compressors, Storage Vessels, and Collections of Fugitive Emissions Components at Compressor Stations

GPA resubmits this comment to fix incorrect citations in our original white paper.

Comment: In addition to the specific requirements in Subparts OOOO and OOOOa, affected facilities in the oil and natural gas sector are subject to certain generally applicable requirements in 40 C.F.R. Part 60. However, to the extent that the specific provisions in Subparts OOOO and OOOOa overlap with those general provisions, EPA has determined that affected facilities need not comply with the generally applicable provisions. Unfortunately, there are inconsistencies in the lists of generally applicable provisions that do not apply to affected facilities under Subparts OOOO and OOOOa. We urge EPA to correct these inconsistencies.

Specifically, Table 3, entitled "Applicability of General Provisions to Subpart OOOO/OOOOa" includes an exhaustive list of the generally applicable provisions and specifies which of those provisions apply.

40 C.F.R. §§ 60.5420 and 60.5420a are narrower provisions that specifically address notification, reporting, and recordkeeping requirements. Like Table 3, these sections also list a number of generally applicable provisions that do not apply to affected facilities under Subparts OOOO and OOOOa. To avoid confusion and uncertainty, these regulatory sections need to address the same generally applicable notification, reporting, and recordkeeping requirements as Table 3.

However, 40 C.F.R. §§ 60.5420 and 60.5420a do not address reconstruction notifications under 40 C.F.R. § 60.15(d). Instead, the exclusions listed in those two sections are limited to 40 C.F.R. § 60.7(a)(1), (3), and (4). This creates confusion for operators as to whether or not the reconstruction notification requirements in 40 C.F.R. § 60.15(d) would apply. To ensure consistency and avoid confusion, EPA should explicitly state in 40 C.F.R. §§ 60.5420(a)(1) and 60.5420a(a)(1) that the reconstruction notification requirements in 40 C.F.R. § 60.15(d) are not required for affected facilities.

Additionally, in Section 60.5420a(a)(1) of the final Subpart OOOOa rule, EPA clarified that certain generally applicable notification requirements for the group of all equipment within a process unit at an onshore natural gas processing plant and for sweetening units at an onshore natural gas processing plant do not apply. EPA should make the same clarifying change for those affected facilities in Section 60.5420(a)(1) for Subpart OOOO.

Request: GPA Midstream requests the following changes to 40 C.F.R. §§ 60.5420 and 60.5420a:

NSPS OOOO

40 C.F.R. § 60.5420(a)(1) If you own or operate an affected facility that is the group of all equipment within a process unit at an onshore natural gas processing plant, or a sweetening unit at an onshore natural gas processing plant, you must submit the notifications required in § 60.7(a)(1), (3), and (4) and § 60.15(d). If you own or operate a gas well, pneumatic controller, centrifugal compressor, reciprocating compressor or storage vessel affected facility you are not required to submit the notifications required in \$60.7(a)(1), (3), -and (4), and \$60.15(d).

NSPS OOOOa

40 C.F.R. § 60.5420a(a)(1) If you own or operate an affected facility that is the group of all equipment within a process unit at an onshore natural gas processing plant, or a sweetening unit at an onshore natural gas processing plant, you must submit the notifications required in § 60.7(a)(1), (3), and (4), and § 60.15(d). If you own or operate a well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, or collection of fugitive emissions components at a well site or collection of fugitive emissions components at a compressor station, you are not required to submit the notifications required in § 60.7(a)(1), (3), and § 60.15(d).

Issue # 22: EPA Must Revise the Recordkeeping Requirements in 40 C.F.R. § 60.5340a(c)(14) to Include Cross-References to the Recordkeeping Requirements in 40 C.F.R. § 60.5413a(e)(4)

GPA resubmits this comment to correct an incorrect statement and citation in our original white paper.

Comment: In its December 12, 2013 petition for reconsideration (item 10), GPA Midstream requested that EPA revise the recordkeeping requirements in 40 C.F.R. § 60.5420 to reflect records that are required in the performance test requirements at 40 C.F.R. § 60.5413(e)(4).

In the preamble to the final rule issued on June 3, 2016, EPA agreed with GPA Midstream's position, stating, "The EPA proposed that the recordkeeping requirements include the repair logs for control devices failing a visible emissions test as required by the rule. Petitioners noted that the recordkeeping requirements of § 60.5420(c) do not include the repair logs for control devices failing a visible emissions test required by § 60.5413(c). We agree that these recordkeeping requirements should be listed and are finalizing them at § 60.5420(c)(14)." 81 Fed. Reg. 35,866. EPA did not make the same correction in the identical provision under Subpart OOOOa.

Request: We request the following change to implement EPA's intent as stated in the preamble to the final Subpart OOOOa rule:

NSPS 0000 – No changes requested; provided as reference.

40 C.F.R. § 60.5413(e)(4) Devices failing the visible emissions test must follow manufacturer's repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant operation. All repairs and maintenance activities for each unit must be recorded in a maintenance and repair log and must be available for inspection.

40 C.F.R. \S 60.5420(c)(14) A log of records as specified in $\S\S$ 60.5412(d)(1)(iii) and 60.5413(e)(4) for all inspection, repair and maintenance activities for each control device failing the visible emissions test.

NSPS OOOOa – Modify 60.5413a(c)(14)

40 C.F.R. § 60.5413a(e)(4) Devices failing the visible emissions test must follow manufacturer's repair instructions, if available, or best combustion engineering practice as outlined in the unit inspection and maintenance plan, to return the unit to compliant

operation. All repairs and maintenance activities for each unit must be recorded in a maintenance and repair log and must be available for inspection.

40 C.F.R. § 60.5420a(c)(14) A log of records as specified in § 60.5412a(d)(1)(iii) and § 60.5413a(e)(4), for all inspection, repair and maintenance activities for each control device failing the visible emissions test.

New Issue #25: Update NESHAP HH to include references to NSPS OOOOa

NESHAP HH includes references to NSPS OOOO. However, NESHAP HH was not updated to include analogous references to OOOOa. GPA requests that NESHAP HH be modified to include such references where appropriate, and we also request interim guidance indicating that analogous references are implied.

40 CFR §63.766 Storage Vessel Standards – Modify subparagraph (d)

40 CFR §63.766(d) This section does not apply to storage vessels for which the owner or operator is subject to and controlled under the requirements specified in 40 CFR part 60, subparts Kb or OOOO or OOOOa; or is subject to and controlled under the requirements specified under 40 CFR part 63 subparts G or CC. Storage vessels subject to and controlled under 40 CFR part 60, subpart OOOO or subpart OOOOa shall submit the periodic reports specified in §63.775(e).

40 CFR §63.769 Equipment Leak Standards – Modify subparagraph (b)

40 CFR 63.769(b) This section does not apply to ancillary equipment and compressors for which the owner or operator is subject to and controlled under the requirements specified in subpart H of this part; or is subject to and controlled under the requirements specified in 40 CFR part 60, subpart OOOO3, or is subject to and controlled under the requirements specified in 40 CFR 60, subpart OOOO3. Ancillary equipment and compressors subject to and controlled under 40 CFR part 60, subpart OOOO or 40 CFR part 60, subpart OOOO3 shall submit the periodic reports specified in §63.775(e).

Additional Information: Centrifugal Compressors

EPA expressed interest in understanding under what circumstances a gathering and boosting compressor station would have centrifugal compressors.

Wet seal centrifugal compressors may be required in certain applications. Dry seals are only feasible where an inert gas or a "sweet" gas is available for the dry seal. Sour gases or acid gases cannot be used for a dry seal because of their corrosive nature. So for example, if the facility is compressing acid gas or sour gas, and an inert gas or dry gas is not available, then a wet seal would be required. This is a unique situation that is not common, but it certainly occurs at some facilities.

Thank you once again for your time. Please let me know if we can be of any further help. If you have any questions, please contact me at (202) 279-1664 or by email at Mhite@GPAmidstream.org.

Sincerely,

Matthew Hite

Vice President of Government Affairs

GPA Midstream Association

Matthew Wite